DIALOG(R) File 351: Derwent WPI (c) 2005 Thomson Derwent. All rts. reserv. **Image available** 012917247 WPI Acc No: 2000-089083/*200008* XRAM Acc No: C00-024937 New 4,4-diaryl-butadienes, used as photostable ultraviolet filters or ultraviolet stabilizers in cosmetic or pharmaceutical compositions Patent Assignee: BASF AG (BADI) Inventor: HABECK T; WESTENFELDER H; WUNSCH T; WUENSCH T Number of Countries: 030 Number of Patents: 012 Patent Family: Kind Week Applicat No Date Patent No Kind Date A 19990619 200008 B EP 967200 A1 19991229 EP 99111837 A 19980626 200008 DE 19828463 A1 19991230 DE 1028463 JP 2000044452 A 20000215 JP 99182254 A 19990628 200019 A 19990626 200025 Α 20000202 CN 99109787 CN 1242984 A 19990625 200033 20000502 BR 992569 Α BR 9902569 A 19990625 200035 Α 20000608 AU 9936801 AU 9936801 A 19990621 US 6093385 A 20000725 US 99336733 200038 B1 20010220 US 99336733 A 19990621 200112 US 6191301 US 2000526528 A 20000316 A 19990619 200228 EP 967200 B1 20020424 EP 99111837 DE 59901286 G 20020529 DE 501286 A 19990619 200236 EP 99111837 A 19990619 ES 2177170 A 19990619 200305 T3 20021201 EP 99111837 20030313 AU 9936801 A 19990625 200328 AU 757965 В Priority Applications (No Type Date): DE 1028463 A 19980626 Patent Details: Patent No Kind Lan Pg Main IPC Filing Notes EP 967200 A1 G 33 C07C-309/12 Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI C07C-309/12 DE 19828463 **A1** JP 2000044452 A 65 A61K-007/42 CN 1242984 A A61K-007/42 BR 9902569 C07C-011/16 Α AU 9936801 Α A61K-007/42 A61K-007/42 US 6093385 A US 6191301 B1 C07C-255/06 Div ex application US 99336733 Div ex patent US 6093385 C07C-309/12 EP 967200 B1 G Designated States (Regional): AT BE CH DE DK ES FI FR GB GR IE IT LI LU NL PT RO SE SI C07C-309/12 Based on patent EP 967200 DE 59901286 G C07C-309/12 Based on patent EP 967200 ES 2177170 **T3** Previous Publ. patent AU 9936801 A61K-007/42 AU 757965 В Abstract (Basic): *EP 967200* A1 NOVELTY - 4,4-Diarylbutadienes (I) are new. DETAILED DESCRIPTION - Diaryl-butadienes of formula (I) (where the diene system is in Z,Z, E,Z, Z,E or E,E configuration, or a mixture of these) are new:

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R1, R2=H; 1-20C alkyl, 2-10C alkenyl, 3-10C cycloalkyl, 3-10C
   cycloalkenyl, 1-12C alkoxy, 1-20C alkoxycarbonyl, mono- or di-(1-12C
   alkyl)-amino, aryl or heteroaryl (optionally substituted); or
   water-solubilizing substituents selected from carboxylate, sulfonate
   and ammonium groups;
       R3=H, COOR5, COR5, CONR5R6 or CN;
       R4=COOR6, COR6 or CONR5R6;
       R5=H, -(X)o-R7 or -(1-6C) alkylene-Q;
       Q=SO3Y, PO3Y or N+(R8)3.A-;
       R6=as R5 but not H;
       X=(CH2)pZ, CHMeCH2Z or CH2CHEtZ;
       p=2-4;
       A=Cl, Br, I or SO4R9;
       Y=H, Na+, K+, Mq2+, Ca2+, Li+, Al3+ or N(R8)4+;
       Z=O or NH;
       R7, R8=H, 1-8C alkyl, 2-6C alkenyl or 1-6C acyl;
       R9=H, 1-6C alkyl or 2-6C alkenyl;
       n=1-3; and
       o=1-150.
       ACTIVITY - Dermatological; antiinflammatory; antiallergic;
   cytostatic.
       MECHANISM OF ACTION - UV absorber.
       USE - The use of (I) is claimed as:
        (i) water-soluble, photostable ultraviolet (UV) filters in cosmetic
   or pharmaceutical compositions for protecting human skin or hair
   against sunlight (where (I) are optionally used in combination with
   other UV absorbers);
        (ii) water-soluble UV-A filters;
        (iii) water-soluble UV stabilizers for cosmetic or pharmaceutical
    compositions; and
        (iv) medicaments.
       Cosmetic and pharmaceutical compositions containing (I) are also
    claimed. (I) protect skin and hair against UV light in the 280-400 nm
    region, especially UV-A light in the 320-400 nm region. As medicaments
    (I) are useful for the prophylaxis of inflammation and allergies of the
    skin and some types of cancer.
       ADVANTAGE - (I) absorb with high extinction in the UV-A region, are
   photostable and have little intrinsic color (i.e. a sharp band
    structure). They are readily soluble in water, aqueous alcohol and
   water-miscible solvents, and are thus easily incorporated in the
    aqueous phase of cosmetic formulations. Emulsions containing (I) have
   high stability, good photostability and a pleasant felling on the skin.
        pp; 33 DwgNo 0/0
Title Terms: NEW; PHOTOSTABLE; ULTRAVIOLET; FILTER; ULTRAVIOLET; STABILISED
  ; COSMETIC; PHARMACEUTICAL; COMPOSITION
Derwent Class: B05; D21
International Patent Class (Main): A61K-007/42; C07C-011/16; C07C-255/06;
  C07C-309/12
International Patent Class (Additional): A61K-007/00; A61K-007/02;
  A61K-007/06; A61K-007/08; A61K-007/44; A61K-007/48; A61K-031/00;
  A61K-031/01; A61K-031/075; A61K-031/16; A61K-031/165; A61K-031/19;
 A61K-031/215; A61K-031/275; A61K-047/06; C07C-059/40; C07C-069/52;
  C07C-069/612; C07C-069/618; C07C-069/73; C07C-069/734; C07C-233/01;
  C07C-233/22; C07C-233/35; C07C-233/40; C07C-235/34; C07C-255/00;
  C07C-309/58; C07C-309/59; C09K-003/00
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